

1 **Claims:**

2 **Claims 1-22 (canceled)**

3 **Please add the following new claims:**

4 **(New) 23. A multi-terrain amphibious vehicle comprising:**

5 **an elongated longitudinally extending chassis having a front end, a rear end, a left side, a**
6 **right side, a centerline, a bottom surface and a top surface;**

7 **at least two left side propulsion units and at least two right side propulsion units;**

8 **said left side propulsion units being longitudinally spaced from each other;**

9 **said right side propulsion units being longitudinally spaced from each other;**

10 **each of said left side propulsion units and said right side propulsion units comprising:**

11 **(a) support means for each of said propulsion units on said bottom surface of said chassis**
12 **comprising: a pair of laterally spaced longitudinally extending framework members secured to said**
13 **bottom surface of said chassis; one of said framework members being an inside framework**
14 **member and said other framework member being an outside framework member; said framework**
15 **member being spaced from each other a distance greater than the width of said propulsion unit;**

16 **(b) a driven axle having an inner end, an outer end and a Y-axis,**

17 **c) first support means connected to said chassis for supporting said inner end of said**
18 **driven axle,**

19 **(d) second support means connected to said chassis for supporting said outer end of said**
20 **driven axle,**

21 **(e) at least two cam-shaped wheels mounted on said driven axle; each cam-shaped wheel**
22 **having a rotation axis that coincides with said Y-axis of said driven axle; each cam-shaped wheel**
23 **having a first perimeter segment having a mid-point, a second perimeter segment having a mid-**
24 **point and a third perimeter segment having a mid-point; said first perimeter segment having a**
25 **substantially arcuate contour and said mid-point of said first perimeter segment extends radially**
26 **farther from said rotation axis than said mid-points of said second and third perimeter segments;**

27 **(f) each of said propulsion units having an elongated outside axle support arm having a top**
28 **end and a bottom end; a transversely extending outside pivot pin having an inner end and an outer**
29 **end; said inner end being rigidly secured to said outside axle support arm adjacent said top end of**

1 said outside axle support arm; said outer end of said outside pivot pin being journaled in a bearing
2 attached to said outside framework member;

3 said bottom end of said outside axle support arm having a bearing attached thereto in
4 which said outer end of said driven axle is journaled;

5 (g) each of said propulsion units having an elongated inside axle support arm having a top
6 end and a bottom end; a transversely extending driveshaft having an inner end and an outer end;
7 an inside sprocket gear is rigidly mounted on said driveshaft adjacent said inner end, said
8 driveshaft is journaled in a bearing attached to said inside framework member with said outer end
9 having a top end sprocket gear rigidly secured thereto;

10 said bottom end of said inside axle support arm having a bearing attached thereto in which
11 said inner end of said driven axle is journaled; a bottom end sprocket gear is rigidly secured to
12 said driven axle of said propulsion unit and said bottom end sprocket gear is in vertical alignment
13 with said top end sprocket gear and a chain passes around said respective top end and bottom end
14 sprocket gears;

15 (h) drive power means mounted on said chassis; and

16 (I) power transmission means connecting said drive power means to said driven axles of
17 said respective left and right side propulsion units.

18 (new) 24. A multi-terrain amphibious vehicle as recited in claim 23 further comprising a vehicle
19 body mounted on said chassis.

20 (new) 25. A multi-terrain amphibious vehicle as recited in claim 24 wherein said vehicle body
21 has a passenger compartment.

22 (new) 26. A multi-terrain amphibious vehicle as recited in claim 23 wherein said vehicle body is
23 a buoyant structure that allows said vehicle to travel upon the top of a body of water.

24 (new) 27. A multi-terrain amphibious vehicle as recited in claim 24 wherein said propulsion units
25 extend transversely beneath said bottom surface of said chassis to a position near said center line
26 of said chassis.

27 (new) 28. A multi-terrain amphibious vehicle as recited in claim 23 wherein there are at least
28 three left side propulsion units and at least three right side propulsion units.

1 (new) 29. A multi-terrain amphibious vehicle as recited in claim 23 wherein there are at least
2 four left side propulsion units and at least four right side propulsion units.

3 (new) 30. A multi-terrain amphibious vehicle as recited in claim 23 wherein each of said
4 propulsion units comprises at least three cam-shaped wheels mounted on said driven axles.

5 (new) 31. A multi-terrain amphibious vehicle as recited in claim 23 wherein each of said
6 propulsion units comprises at least four cam-shaped wheels mounted on said driven axles.

7 (new) 32. A multi-terrain amphibious vehicle as recited in claim 23 wherein at least one of said
8 second or third perimeter segments of said cam-shaped wheels has a cavity formed therein that
9 functions as a water propulsion paddle when said vehicle is traveling upon the top surface of a
10 body of water.

11 (new) 33. A multi-terrain amphibious vehicle as recited in claim 23 wherein both said second
12 and third perimeter segments of said cam-shaped wheels have a cavity formed therein that
13 functions as a water propulsion paddle when said vehicle is traveling on the top surface of a body
14 of water.

15 (new) 34. A multi-terrain amphibious vehicle as recited in claim 23 wherein said cam-shaped
16 wheels of each propulsion unit are rigidly connected to said driven axle to form an assembled
17 structure in which there is always a first segment of one of said cam-shaped wheels oriented to
18 contact a ground surface during each 360 degrees of rotation of said driven shaft.

19 (new) 35. A multi-terrain amphibious vehicle as recited in claim 23 further comprising shock
20 absorber means connected between said respective inside and outside support arms and said
21 chassis for cushioning the ride of said vehicle over rough terrain.

22 (new) 36. A multi-terrain amphibious vehicle as recited in claim 23 wherein said drive power
23 means comprises at least one internal combustion engine.

24 (new) 37. A multi-terrain amphibious vehicle as recited in claim 23 wherein said power
25 transmission means comprises a primary hydraulic pump driven by said drive power means that is
26 connected by hydraulic hoses to a secondary hydraulic pump on each of said driven axles of said
27 respective propulsion units.